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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/481,627      | 01/12/2000  | Ping Zhou            | A60-17042A1-US      | 5879             |
| 128             | 7590        | 12/30/2003           |                     |                  |
|                 |             |                      | EXAMINER            |                  |
|                 |             |                      | PAK, SUNG H         |                  |
|                 |             |                      | ART UNIT            | PAPER NUMBER     |
|                 |             |                      | 2874                |                  |

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/481,627             | ZHOU, PING          |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Sung H. Pak            | 2874                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### P r i o r i t y for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 September 2003.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 40-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 40-52 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1003.                    6) Other:

## **DETAILED ACTION**

Applicant's amendment filed 9/24/2003 has been entered. Claims 40-52 are now pending. All pending claims have been carefully reviewed by the examiner, however they are not patentable. A new ground of rejection is furnished in this office action in view of the amendment.

### ***Information Disclosure Statement***

All references submitted in the information disclosure statement have been considered. Please refer to PTO-1449 enclosed herewith.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 40-45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of U.S. Patent No. 6,081,638. Although the conflicting claims are not identical, they are not patentably

distinct from each other. Regarding claim 40, although claim 18 of '638 patent does not explicitly recite "an optical header" comprising a light source and a detector, the light source and a detector recited in claim 18 of '638 patent effectively combine to form an optical header. Therefore an optical header is inherent in claim 18 of '638 patent.

Regarding claims 41-45, claim 18 of '638 patent does not explicitly recite methods of moving the optical fiber while monitoring and maximizing the intensity of light received by the monitor. However, such methods steps are well known in fiber packaging art. Such steps are advantageously used to accurately align optical fibers with optical devices, thereby increasing the coupling efficiency. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify claim 18 of '638 patent to recite methods of moving the optical fiber while monitoring and maximizing the intensity of light received by the monitor.

Claims 46-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 25, 27, 29 (respectively) of U.S. Patent No. 6,081,638. Although the conflicting claims are not identical, they are not patentably distinct from each other. Although claim 25 of '638 patent does not explicitly recite the detector being positioned opposite the fibers from the light sources, this configuration is inherent. Since claim 25 of '638 patent recites the "light source [being] aligned with one of said optical fibers such that light from each of said light sources impinges upon the inner reflective surface of the associated optical fiber, forming a first light component that is reflected substantially along a longitudinal axis of

the optical fiber and a second light component that is transmitted through the inner reflective surface..." Since light travels in a straight line, the light source and the detector must be positioned opposite from each other. Therefore, the recitations of claims 46-48 are obvious over the recitations of claims 25, 27, 29 of '638 patent.

Claims 49-52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 34-35 of U.S. Patent No. 6,081,638. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claims 34-35 of '638 patent discloses an optical device with all the limitations set forth in the claims, except it does not teach the use of plurality of VCSELs and plurality of optical fibers. However the use of plurality of VCSELs and optical fibers is well known and common in the optical communications device art. Such an arrangement is advantageously used to increase the number of optical channels and increase the bandwidth of the optical communications device. VCSELs are advantageously used because of their small size, allowing for a smaller optical communications device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify claims 34-35 of '638 patent to recite plurality of light sources and plurality of optical fibers.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



sp

Sung H. Pak  
Examiner  
Art Unit 2874



Brian Healy  
Primary Examiner